

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Final

**AIR QUALITY PERMIT
Issued under 401 KAR 52:030**

Permittee Name: Modine Manufacturing Company
Mailing Address: 551 Tapp Road, Harrodsburg, Kentucky 40330

Source Name: Modine Manufacturing Company
Mailing Address: 551 Tapp Road
Harrodsburg, Kentucky 40330

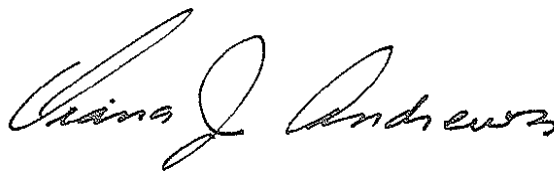
Source Location: Same as above

Permit ID: F-07-010
Agency Interest #: 3153
Activity ID: APE20060002
Review Type: Conditional Major, Operating
Source ID: 21-167-00014

Regional Office: Frankfort Regional Office
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Application
Complete Date: January 24, 2007
Issuance Date: March 28, 2007
Revision Date:
Expiration Date: March 28, 2012



**John S. Lyons, Director
Division for Air Quality**

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Rev #	Permit type	APE#	Complete Date	Issuance Date	Summary of Action
----	Initial Issuance	20060002	1/24/07		Initial Conditional Major Issuance

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**EP#17 (EU#17) Conveyorized Vapor Degreaser, Baron Blakeslee, Model TH-LLL, Serial #24345****Description:**

Automated batch vapor-cleaning trichloroethylene (TCE) solvent degreasing unit, with a 224 square feet solvent air interface (In-line cleaning machine).

Maximum processing rate: 4.55 gallon per hour solvent.

Construction Commenced: August 1980.

APPLICABLE REGULATIONS:

For the Conveyorized Vapor Degreaser: Regulation 401 KAR 63:002, Section 3(p), incorporating by reference 40 CFR 63, Subpart T, applies to hazardous air pollutant emissions from halogenated solvent degreasing operations.

1. Operating Limitations:

a. The permittee shall not operate for more than 2000 hours/year (Self-imposed to preclude Title V (401 KAR 52:030 Section 1)).

b. 40 CFR 63.463:

§ 63.463 (c) (1) Each owner or operator of an existing in-line cleaning machine shall comply with the requirements specified in either paragraph (c)(1)(i) or (c)(1)(ii) of this section.

The permittee has selected (c)(1)(i).

§ 63.463 (c) (1) (i) Employ one of the control combinations listed in table 3 of this subpart or other equivalent methods of control as determined using the procedure in § 63.469, equivalent methods of control section.

Table 3 – Control Combinations for Existing In-Line Solvent Cleaning Machines

Option	Control Combinations
1	Superheated vapor, freeboard ratio of 1.0.
2	Freeboard refrigeration device, freeboard ratio of 1.0.
3	Dwell, freeboard refrigeration device
4	Dwell, carbon adsorber

The permittee has selected Control Combination 4.

- i. Maintain an idling or downtime mode cover that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, or other defects. The cover may be off during maintenance, monitoring, or when the solvent has been removed.
- ii. The reduced room draft must be maintained at the conditions in which it was determined to not exceed 15.2 meters per minute.
- iii. The cleaning machine shall have a freeboard ratio of 0.75 or greater.
- iv. The cleaning machine shall have an automated parts handling system capable of moving parts or parts basket at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of clean parts.
- v. The vapor-cleaning machines shall be equipped with a device that shuts off sump heat if the sump liquid solvent level drops to the sump heater coils.

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- vi. The vapor-cleaning machines shall be equipped with a vapor level control device that shuts off sump heat if the vapor level rises above the height of the primary condenser.
- vii. The cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of 40 CFR 63, Subpart T, condition 63.463(e)(2)(vii).
- viii. The dwell, freeboard refrigeration device, reduced room draft, and carbon adsorption device shall be maintained and operated according to manufacturer's specifications during operation of the cleaning machine.
- ix. The parts basket or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.
- x. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air
- xi. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the Division for Air Quality.
- xii. Parts baskets or parts shall not be removed from any solvent-cleaning machine until dripping has stopped.
- xiii. The vapor-cleaning machine shall have a primary condenser. During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater. During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the vapor layer allowed to collapse before the primary condenser is turned off.
- xiv. The solvent shall be transferred to and from the solvent cleaning machine using threaded or other leak proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
- xv. Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturer's of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.
- xvi. The solvent cleaning machine shall be operated according to manufacture's specifications. All operators must complete and pass the applicable sections of the test of solvent cleaning operating procedures in 40 CFR 63, Subpart T, Appendix A, if requested during an inspection by the Division for Air Quality.
- xvii. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers.
- xviii. Sponges, fabric, wood, and paper products shall not be cleaned.

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**2. Emission Limitations:****a. 40 CFR 63.463(e)(2)(vii)(A):**

The concentration of the solvent in the exhaust of the carbon bed adsorber shall be maintained below 100 parts per million (PPM) of any halogenated HAP. If the concentration exceeds 100 PPM, then the permittee shall adjust the desorption schedule or replace the disposable canister.

b. See Section D for HAP emission limitations.

3. Testing Requirements:**a. 40 CFR 63.465(d) and (e)****i. Calculate the dwell time by the following methods.**

1. Determine the amount of time for the part or parts basket to cease dripping once placed in the vapor zone. The part or parts basket used for this determination must be at room temperature before being placed in the vapor zone.
2. The proper dwell time for parts to remain in the freeboard area above the vapor zone is no less than 35 percent of the time determined above.

ii. Determine the potential to emit using the following procedures. A facility's total potential to emit is the sum of the hazardous air pollutant (HAP) emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility.

1. Determine the potential to emit for each individual solvent cleaning using the following equation.

$$PTE_i = H_i \times W_i \times SAI_i$$

Where:

PTE_i = potential to emit for solvent cleaning machine i (kilograms of solvent per year),

H_i = hours of operation for solvent cleaning machine i (hours per year),

W_i = working mode uncontrolled emission rate (kilograms per square meter per hour), and

SAI_i = solvent/air interface area of solvent cleaning machine i (square meters).

40 CFR 63, Subpart T, condition 63.461 defines the solvent/air interface area for those machines that have a solvent/air interface.

2. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the following equation.

$$SAI = 2.20 * (Vol)^{0.6}$$

Where SAI = solvent/air interface area (square meters), and Vol = cleaning capacity of the solvent cleaning machine (cubic meters).

3. Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**4. Specific Monitoring Requirements:**

- a. 40 CFR 63.466
 - i. The permittee shall perform the following inspections on a monthly basis on the solvent cleaning machines:
 - 1. The dwell time shall be determined by measuring the period of time that parts are held within the freeboard area of the solvent cleaning machine after cleaning.
 - 2. The temperature of the center of the air blanket for the freeboard refrigeration device shall be measured with a thermometer or thermocouple during idling periods.
 - 3. The hoist speed shall be determined quarterly by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes and shall not exceed 3.4 meters per minute.
 - ii. The permittee shall perform the following inspections on a weekly basis on the solvent cleaning machines.
 - 1. The wind speed in the reduced room draft area shall be measured quarterly with a velometer. The room parameters set forth in the initial compliance demonstration shall be monitored on a weekly basis.
 - 2. Measure and record the concentration of the halogenated HAP solvent from the exhaust of the carbon bed adsorber weekly with a calorimetric detector tube. The sampling port must be located at least 8 stack diameters downstream from any flow disturbances or other outlet and at least 2 diameters upstream from any flow disturbances. This test shall be conducted while the solvent cleaning machine is in operation and venting to the adsorber. The exhaust concentration shall be determined by the methods described in 40 CFR 63.466(e).
- b. Refer to Section F.

5. Specific Recordkeeping Requirements:

- a. 40 CFR 63.467
 - i. The permittee shall maintain the following records for the lifetime of the solvent cleaning machine.
 - 1. Owners manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment.
 - 2. The date of installation for the solvent cleaning machine and all of its control devices.
 - 3. The tests required to determine the appropriate dwell time for each part or parts basket as specified in 40 CFR 63, Subpart T, condition 63.465(d).
 - 4. The halogenated HAP solvent content for each solvent used in the solvent cleaning machine.
 - ii. The permittee shall maintain the following records for a period of five years.
 - 1. The results of all control device monitoring required under 40 CFR 63.466.
 - 2. Information on the actions taken to comply with 40 CFR 63.463(e)(vii).
 - 3. Estimates of the annual solvent consumption for each solvent cleaning machine.
 - 4. The date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon bed adsorber exhaust.

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. The average wind speed in the reduced room draft area shall be recorded quarterly.
- b. Refer to Section F.
- c. Monthly records shall be kept of the Degreaser's number of hours of operation, 401 KAR 52:030, Section 1.

6. Specific Reporting Requirements:

40 CFR 63.468

- a. The permittee shall submit annual reports by February 1 following the reported year and shall include the following.
 - i. A signed statement from the facility owner or a designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR 63, Subpart T, condition 63.463(d)(10)".
 - ii. An estimate of solvent consumption for each solvent cleaning machine.
- b. The permittee shall submit semiannual reports containing information on the actions to comply with the reduced room draft and dwell limitations.

7. Specific Control Equipment Operating Conditions:

- a. The carbon bed adsorber shall not be bypassed during desorption.
- b. The reduced room draft must be maintained such that the flow or movement of air across the freeboard area of the solvent cleaning machine shall not exceed 15.2 meters per minute.
- c. Ensure that the lip exhaust is located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level.

8. Alternate Operating Scenarios:

None.

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EP#03 (06, 11, &12)****Electrocoat Paint Line (E-Coat)****Description:**

Electrodeposition surface coating unit: includes a drying oven and an ultrafiltration membrane.

Maximum processing rate (black epoxy): 0.714 gallon per hour applicator capacity.

Maximum processing rate (clear epoxy): 1.429 gallon per hour applicator capacity.

Construction Commenced: 1980

APPLICABLE REGULATIONS:

401 KAR 59:010. New process operations, applicable to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced on or after July 2, 1975.

1. Operating Limitations:

The affected facility shall operated so as not to exceed the emission limitations in Section B (2) **Emission Limitations.**

2. Emission Limitations:

- a. The source-wide emissions of any individual Hazardous Air Pollutant (HAP) shall not exceed nine (9) tons per rolling twelve-month period.
- b. Pursuant to 401 KAR 59:010
 - i. Section 3 (1), opacity shall not exceed 20%.
 - ii. Section 3 (2), hourly particulate emissions for each emission point shall not exceed the following limit:

For process rates up to 1,000 lbs/hr: $E = 2.34$

For process rates up to 60,000 lbs/hr: $E = 3.59 P^{0.62}$

For process rates in excess of 60,000 lbs/hr: $E = 17.31 P^{0.16}$

For the equations: E = rate of emission in lb/hr and P = process weight rate in tons/hr (monthly throughput in tons/monthly hours of operation).

Compliance Demonstration:

Emission limitation a : Refer to **Section D** for compliance demonstration requirements. Emission limitation b: This affected facility shall be assumed to be in compliance with the above opacity and mass standards due to the nature of this type of coating operation.

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

4. Specific Monitoring Requirements:

The twelve-month rolling average and rolling total emissions of any single HAP shall be monitored monthly. Refer to Section D for details.

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

- a. Monthly records of the purchase and usage of paints and solvents or any HAP/VOC containing material shall be maintained.
- b. Monthly records of the twelve-month rolling average and twelve-month rolling total emissions of individual HAP shall be maintained.

6. Specific Reporting Requirements:

The summary report of monitoring required by Section F (5) of this permit shall consist of an emissions calculation spreadsheet summarizing the twelve-month rolling average and twelve-month rolling total emissions of individual and total HAP.

7. Specific Control Equipment Operating Conditions:

None.

8. Alternate Operating Scenarios:

N/A

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EU#14 (35)

Copper Coil Brazing

Description:

Copper coil heat exchangers brazing

Maximum processing rate: 1.0 pound per hour braze ring and wire flux.

Construction Commenced: 08/79.

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010: New process operations.

1. Operating Limitations:

None

2. Emission Limitations:

- a. i. Pursuant to 401 KAR 59:010, Section 3, opacity shall not exceed 20%.
- ii. Pursuant to 401 KAR 59:010, Appendix A, The emissions of particulate matter shall not exceed the allowable rate limit as calculated by the following equations using the process weight rate (in units of tons/hr).

For process rates up to 1,000 lbs/hr:	$E = 2.34$
For process rates up to 60,000 lbs/hr:	$E = 3.59 P^{0.62}$
For process rates in excess of 60,000 lbs/hr:	$E = 17.31 P^{0.16}$

For the equations: E = rate of emission in lb/hr and P = process weight rate in tons/hr (monthly throughput in tons/monthly hours of operation).

Compliance Demonstration Method:

401 KAR 59:010, New process operations:

- i. To provide reasonable assurance that the particulate matter emission limitations are being met, the permittee shall monitor the amount and type of process weight added to each particulate matter emissions unit. The process weight shall be determined as the average hourly tons added to the emission unit averaged over a month period. Average particulate emissions shall be calculated as follows:
 one- Hourly Emission Rate = [Monthly processing rate x Emission Factor as determined from AP-42 * / (Hours of operation per month)] (1-Control Efficiency)
 - * If an Emission Factor other than that taken from AP-42 is used, documentation on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.
- ii. Compliance with the opacity limits shall be demonstrated through the following methods:
 The permittee shall perform the monitoring and recordkeeping requirements listed under **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements** during all periods.

- b. See Section D for Plant Wide limits for HAPs.

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

4. Specific Monitoring Requirements:

- a. The total monthly processing rate.
- b. The hours per month of the operation of the unit(s).
- c. On a monthly basis, the permittee shall monitor all materials containing HAP(s), each HAP, and total HAP(s) emissions.
- d. Observations of visible emissions from each emission points shall be made monthly. If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.

5. Specific Recordkeeping Requirements:

- a. The total monthly processing rate.
- b. The hours per month of the operation of the unit(s).
- c. All materials containing HAP(s), each HAP, and total HAP(s) emissions on a monthly basis.
- d. A log shall be kept of all emission observations. Notation in the monthly log shall be made of the following:
 - i. monthly observations of visible emissions during operation of associated equipment.
 - ii. Observations of visible emissions during all periods of control equipment malfunction.
 - iii. If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.

6. Specific Reporting Requirements:

Any exceedance over the opacity or particulate emission limits as stated in this permit shall be reported to the Division as specified in Section F.8. The company shall certify to the Division, annually, whether a monthly visible emission survey was conducted for this emission point, and whether the emission point was in compliance with the applicable opacity requirements.

7. Specific Control Equipment Operating Conditions:

None.

8. Alternate Operating Scenarios:

None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EP#33 and EP#38, (#61 and #60)****Thermal Degreasers (identical units)****Description:**

Thermal units designed to remove and destroy hydrocarbon grease

Maximum processing rate: 1.28 gallons consumed (oil) per hour (both units)

Construction Commenced: 10/1/2006.

Control Equipment: Integrated Thermal Oxidizer

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, New process operations

Regulation 401 KAR 52:030, federally-enforceable permits for non-major sources.

1. Operating Limitations:

a. For thermal oxidizer and capture system which are not permanent total enclosure, the permittee must:

- (i) Demonstrate initial compliance for each capture system and control device through performance tests;
- (ii) Establish the operating limits for each capture system and control device during performance testing; and,
- (iii) Meet the operating limits at all times after establishing them.

b. The permittee shall operate the associated Thermal Oxidizer at all time while the thermal degreasers are in operation.

Compliance Demonstration: Records shall be kept of the times when the units are operating but the control devices are not. Records shall also be kept of the maintenance activities.

2. Emission Limitations:

a. Pursuant to 401 KAR 59:010, Section 3, opacity shall not exceed 20%.

b. Pursuant to 401 KAR 59:010, Appendix A, The emissions of particulate matter shall not exceed the allowable rate limit as calculated by the following equations using the process weight rate (in units of tons/hr).

For process rates up to 1,000 lbs/hr: $E = 2.34$

For process rates up to 60,000 lbs/hr: $E = 3.59 P^{0.62}$

For process rates in excess of 60,000 lbs/hr: $E = 17.31 P^{0.16}$

For the equations: E = rate of emission in lb/hr and P = process weight rate in tons/hr (monthly throughput in tons/monthly hours of operation).

Compliance Demonstration Method:

This affected facility shall be assumed to be in compliance with the above opacity and mass standards due to the nature of this type of degreasing operation.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

Pursuant to Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing for volatile organic compounds, destruction and capture efficiency for VOCs using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility and at such other times as may be required by the cabinet.

4. Specific Monitoring Requirements:

Refer to Section F for general monitoring requirements.

5. Specific Recordkeeping Requirements:

The permittee shall maintain the records of the following:

- a. Operating parameters of the control equipment listed above in monitoring, which ensures the efficiency of the unit as required in the permit.
- b. All monitoring required in “Specific Monitoring Requirements” above.

6. Specific Reporting Requirements:

None

7. Specific Control Equipment Operating Conditions:

As specified by manufacturer.

8. Alternate Operating Scenarios:

None.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. EP 35 (66-69) Parallel Flow Manufacturing	401 KAR 59:010
2. EP 36 (70 and 71) Charge Air Cooler	NA
3. EP 34 (62-65) Controlled Air Braze Furnace	401 KAR 59:010
4. EP 37 (72) Manual and Robotic Welders	401 KAR 59:010
5. EP 10 (21) and EP 11 (22) Solder Repair Stations	401 KAR 59:010
6. EP 14 (35) Copper Coil Brazing	NA
7. EP 30 (47 to 55) hand Brazing Operations	401 KAR 59:010
8. EP 22 (26) Mig Welding Operations (3)	401 KAR 59:010
9. EP 44 () Ultrasonic Soldering	401 KAR 59:010
10. EP 31 (46) Maintenance Repair Stations	401 KAR 59:010
11. EP 24, 25, and 25A Cleaning/coating	401 KAR 59:010
12. EP 28 (21B) NG Boiler rated at 8.4 MMBtu/hr	401 KAR 59:015
13. EP 29 (21A) NG Boiler rated at 7.3 MMBtu/hr	401 KAR 59:015
14. EP 57 (57) Coil Braze Heated Air Make-up unit	NA
15. EP 58 (58) Coil Braze Heated Air Make-up unit	NA
16. EP 59 (59) Coil Braze Heated Air Make-up unit	NA
17. EP 39 () New Heated Air Make-up Units (2)	NA
18. EP 32 (20 and 29) Charge/Test Booth	NA

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. **Emission Limitations:**

The permittee shall limit source wide emissions of single Hazardous Air Pollutants (HAP) to 9 tons or less, and combined HAP to 22.5 tons or less, during any consecutive 12 months period. [401 KAR 52:030]

Monthly records to demonstrate compliance with this limitation shall be maintained and the emissions of individual and combined HAPs shall be reported on a semi-annual basis. Individual and combined HAP emissions shall be calculated and recorded on a *monthly* basis. These records shall be summarized in tons per month of individual and combined HAP emissions; subsequently, tons of individual and combined HAP emissions per rolling twelve-month period shall be recorded. In addition, these records shall demonstrate compliance with the individual and combined HAP emission limitation listed herein for the conditional major limitation. These records shall be maintained on site for a period of five years from the date the data was collected and shall be readily available.

Compliance Demonstration Method:

HAP emissions from the above affected facilities shall be calculated using the equation (i) below. Emissions are totaled source wide using the equation (ii) of this Section and compared with the limits set therein.

$$(i) \quad \text{HAP Emission (lb/hr)} = (\text{PW} \times \text{EF} \times (1 - \text{control efficiency}))$$

Where, PW = process weight in SCC unit per hour

EF = HAP emission factor (SCC unit) as found in the emissions inventory system or as provided in MSDS sheet

$$(ii) \quad \text{HAP Emissions;} \quad HAP_j = \sum_{i=1}^n (HAP_j)_i$$

Where, HAP_j = HAP emission (i.e. TCE, toluene, etc.)

$(HAP_j)_i$ = amount of HAP_j emitted at emission point "i".

n = total number of emission points

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)(1) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place (as defined in this permit), and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality[401 KAR 52:030 Section 3(1)(f)1a and Section 1a (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Section 1b V(3) and (4) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Pursuant to 401KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of each term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Frankfort Regional Office
643 Teton Trail, Suite B
Frankfort, KY 40601

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.
12. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
 - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
 - i. The size and location of both the original and replacement units; and
 - ii. Any resulting change in emissions;
 - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
 - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
 - d. The replacement unit shall comply with all applicable requirements; and
 - e. The source shall notify Regional office of all shutdowns and start-ups.
 - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
 - i. Re-install the original unit and remove or dismantle the replacement unit; or
 - ii. Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a (2) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a (5) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
5. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a (6) and (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].
7. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a (11) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
8. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a (3) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a (12)(b) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
10. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a (9) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
11. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
12. This permit does not convey property rights or exclusive privileges [Section 1a (8) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
13. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
15. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
17. Permit Shield – A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in this permit; and
 - b. Non-applicable requirements expressly identified in this permit.
18. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].
19. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

(c) Permit Revisions

1. Minor permit revision procedures specified in 401 KAR 52:030 Section 14 (3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14 (2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
2. Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
3. Emergency conditions listed in General Provision G(f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof[401 KAR 52:030 Section 23(2)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

SECTION I - COMPLIANCE SCHEDULE

N/A